



**Arbovirus Surveillance Program**  
**Massachusetts Department of Public Health**  
**Infectious Diseases Laboratory Division**  
**State Laboratory Institute**

**Date:** October 6, 2000

This is the last week mosquitoes will be routinely collected; however, targeted trapping of overwintering mosquitoes and avian surveillance for WNV will continue. The following is a summary of surveillance activity through October 6, 2000.

One thousand six hundred and forty-four dead birds have been submitted for testing to date. Of these 1290 (78%) were suitable for testing. Three hundred and forty-four birds, 318 crows and 26 birds of other species, were found positive for WNV.

**The 344 WNV-infected birds were found in the following cities and towns:**

Abington (2), Acushnet (1), Andover (1), Arlington (2), Barnstable (1), Belmont (7), Beverly (1), Billerica (3), Bolton (1), Boston (48), Boxford (1), Braintree (4), Bridgewater (2), Brockton (2), Brookline (58), Cambridge (28), Carlisle (2), Chicopee (1), Cohasset (4), Concord (2), Dedham (1), Dudley (1), Duxbury (1), East Bridgewater (2), Easton (1), Fairhaven (1), Fall River (3), Foxboro (2), Framingham (2), Freetown (2), Groton (1), Halifax (1), Hampden (3), Hingham (7), Holbrook (1), Holliston (10), Hopkinton (2), Hull (2), Lakeville (2), Lowell (2), Ludlow (1), Lynn (2), Malden (3), Marion (4), Marshfield (2), Medford (5), Middleboro (25), Middleton (1), Millville (1), Nantucket (1), Natick (3), Needham (1), New Bedford (1), Newton (24), Northboro (1), Norton (1), Oxford (1), Palmer (2), Peabody (6), Plympton (3), Randolph (2), Rochester (2), Rockland (1), Salem (3), Seekonk (1), South Hadley (1), Springfield (1), Stoughton (1), Swampscott (2), Tewksbury (4), Topsfield (1), Upton (1), Walpole (1), Waltham (2), Watertown (1), Wellesley (2), Weymouth (7), West Springfield (1), Westboro (1), Wilbraham (2) and Wrentham (1).

Mosquito trapping continued this week at the sixteen regular long-term sites in Plymouth, Bristol, Norfolk, Middlesex and eastern Worcester Counties. Due to cool temperatures mosquito collections were very low yielding only 13 pools. One pool of *Aedes canadensis* trapped in Halifax on 9/30 tested positive for EEEV. A season total of 2,214 mosquito pools, collected by the Arbovirus Surveillance Program and local Mosquito Control District Programs, from sites throughout Massachusetts have been tested. Fifteen EEEV isolates and 4 WNV isolates have also been found in mosquitoes this season.

Samples from 234 humans have been tested for EEEV and WNV to date. As previously reported, in early September one patient from Rockland (Plymouth County) tested positive for EEEV. Two hundred and twenty-eight were negative and five are pending results.

Samples have also been submitted from 18 horses, one zebra, and one llama. One horse from Bedford (Middlesex County), that became ill on 8/26, tested positive for WNV. Fourteen horses, the zebra and the llama were negative. Results are pending on 3 horses.

A total of 56 emu, from two farms in Bristol County, died of symptoms clinically consistent with EEEV infection in emus. Samples from 10 emus were submitted for testing. All were positive for EEEV.

Weekly arbovirus reports and informational material on WNV and EEEV can be accessed at <http://www.state.ma.us/dph>.

## **Total Number of Mosquitoes Analyzed: 27,242**

### **Virus Isolates in Mosquito Pools:**

<b>Virus</b>	<b>Mosquito</b>	<b>Site</b>	<b>Collection Date</b>
1 HJV	<i>Culex pipiens</i>	Boston	6/29/00
1 EEEV	<i>Culiseta melanura</i>	Easton	7/23/00
1 EEEV	<i>Culiseta melanura</i>	Boston	7/24/00
<b>1 WNV</b>	<i>Culex spp.</i>	Brookline	8/08/00
1 EEEV	<i>Culiseta melanura</i>	Foxboro	8/14/00
<b>1 WNV</b>	<i>Culex spp.</i>	Boston	8/20/00
<b>1 WNV</b>	<i>Culex restuans</i>	Brookline	8/25/00
<b>1 WNV</b>	<i>Aedes triseriatus</i>	Brookline	9/02/00
1 EEEV	<i>Culiseta melanura</i>	Hanover	9/02/00
1 HJV	<i>Culiseta melanura</i>	Hanover	9/02/00
1 HJV	<i>Culiseta melanura</i>	Carver	9/02/00
1 EEEV	<i>Culiseta melanura</i>	Easton	9/03/00
1 EEEV	<i>Culiseta melanura</i>	Foxboro	9/03/00
1 HJV	<i>Culiseta melanura</i>	New Bedford	9/03/00
1 EEEV	<i>Culiseta melanura</i>	Boston	9/07/00
1 EEEV	<i>Aedes vexans</i>	Boston	9/07/00
1 HJV	<i>Culiseta melanura</i>	Westboro	9/09/00
2 HJV	<i>Culiseta melanura</i>	Halifax	9/09/00
1 EEEV	<i>Culiseta melanura</i>	Easton	9/09/00

1 EEEV	<i>Culiseta melanura</i>	Brockton	9/09/00
1 EEEV	<i>Culiseta melanura</i>	Boston	9/15/00
1 EEEV	<i>Culiseta melanura</i>	Halifax	9/16/00
1 HJV	<i>Culiseta melanura</i>	Halifax	9/16/00
1 EEEV	<i>Culiseta melanura</i>	Easton	9/23/00
1 EEEV	<i>Culex pipiens</i>	Middleboro	9/20/00
1 HJV	<i>Culiseta melanura</i>	New Bedford	9/23/00
1 HJV	<i>Culiseta melanura</i>	Halifax	9/23/00
1 EEEV	<i>Aedes canadensis</i>	Halifax	9/30/00

**Total: 4 WNV, 15 EEEV, 10 HJV**



# *Mosquito Surveillance Cumulative Test Report      05/31/00 to 10/06/00*

## *Mosquito Species\**

## *Virus in Mosquito Pools\*\**

<i>Site</i>	<i>Cs mel</i>	<i>Cq per</i>	<i>Ae can</i>	<i>Ae vex</i>	<i>Cx pip</i>	<i>Cx other</i>	<i>Other Sp</i>	<i>EEEV</i>	<i>HJV</i>	<i>WNV</i>
Bedford	0	1	0	400	0	21	11	0	0	0
Boston	2	0	0	1	584	667	9	0	0	0
Brockton	217	25	17	9	18	14	0	1	0	0
Brookline	0	0	0	1	80	65	7	0	0	2
Canton	144	92	30	22	18	14	0	0	0	0
Carver	533	350	39	2	15	4	0	0	1	0
Easton	1521	23	345	15	78	81	11	4	0	0
Foxboro	322	88	54	13	36	9	0	2	0	0
Greenfield	2	2	0	5	42	12	3	0	0	0
Halifax	1723	28	65	4	56	32	12	2	4	0
Hanover	466	7	9	33	16	6	1	1	1	0
Holliston	360	8	89	8	14	23	0	0	0	0
Hopkinton	0	0	1	13	143	341	1	0	0	0
Kingston	542	43	12	3	53	19	0	0	0	0
Lakeville	89	39	8	0	55	20	114	0	0	0
Nantucket	0	0	0	0	76	9	0	0	0	0
New Bedford	963	17	25	6	89	31	4	0	2	0
Northampton	1	3	18	250	30	2	2	0	0	0
Norton	89	2	1	32	177	24	0	0	0	0
Pittsfield	0	0	0	0	89	21	2	0	0	0
Raynham	164	24	23	16	20	13	18	0	0	0
Reading	0	0	0	0	0	55	0	0	0	0
Rehoboth	89	7	65	11	12	4	1	0	0	0
South Hadley	1	1	0	4	236	48	0	0	0	0
Springfield	19	4	7	17	60	35	0	0	0	0
Upton	0	0	0	0	0	57	1	0	0	0
Walpole	178	328	42	83	18	4	8	0	0	0
Westboro	363	33	68	31	62	18	6	0	1	0
Westport	183	1	38	10	2	18	2	0	0	0
<b><i>Total for DPH</i></b>	<b>7971</b>	<b>1126</b>	<b>956</b>	<b>989</b>	<b>2079</b>	<b>1667</b>	<b>213</b>	<b>10</b>	<b>9</b>	<b>2</b>

## *Mosquito Control Districts Cumulative Test Report through 10/06/00*

<i>Site</i>	<i>Mosquito Species*</i>							<i>Virus in Mosquito Pools**</i>		
	<i>Cs mel</i>	<i>Cq per</i>	<i>Ae can</i>	<i>Ae vex</i>	<i>Cx pip</i>	<i>x other</i>	<i>Other Sp</i>	<i>EEEV</i>	<i>HJV</i>	<i>WNV</i>
Berkshire County MCD	0	0	0	0	0	0	11	0	0	0
Bristol County MCD	206	3	3	17	1020	223	70	0	0	0
Cape Cod MCD	0	0	0	0	0	3009	0	0	0	0
Central MA MCD	0	0	4	0	201	226	13	0	0	0
CMMCP	0	0	0	0	66	253	4	0	0	0
East Middlesex MCD	0	0	2	0	381	2064	18	0	0	1
Essex County MCD	1	0	0	1	85	9	3	0	0	0
Norfolk County MCD	0	0	0	0	249	64	9	0	0	0
Northeast MCD	9	0	0	0	31	2	0	0	0	0
Plymouth County MCD	77	11	137	38	310	151	4	1	0	0
Suffolk County MCD	160	251	113	1169	951	591	21	4	1	1
<b><i>Total for MCD</i></b>	<b>453</b>	<b>265</b>	<b>259</b>	<b>1225</b>	<b>3294</b>	<b>6592</b>	<b>153</b>	<b>5</b>	<b>1</b>	<b>2</b>

**\* Mosquito species name abbreviations:**

**Cs mel** = *Culiseta melanura*

**Cq per** = *Coquillettidia perturbans*

**Ae can** = *Aedes canadensis*

**Ae vex** = *Aedes vexans*

**Cx pip** = *Culex pipiens*

**\*\*Virus name abbreviations:**

**EEEV** = Eastern Equine Encephalitis Virus

**HJV** = Highlands J Virus

**WNV** = West Nile Virus